



THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT Application of SHIRAISHI *et al.*

Group Art Unit: 3724

Application No. 10/783,022

Examiner: Payer

Filed: February 23, 2004

DEVICE FOR REMOVING COATING ON OPTICAL FIBER

January 24, 2007

REPLY BRIEF IN RESPONSE TO SUPPLEMENTAL EXAMINER'S ANSWER

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This Reply Brief is filed in response to the Supplemental Examiner's Answer mailed 28 February 2007. This Reply Brief is timely filed within two months from the 28 February 2007 mailing date of the Examiner's Answer.

On pages 5-6 of the Supplemental Examiner's Answer, the Examiner states:

Appellants argue, at page 5 of the brief, the claimed invention is a device for removing the covering layer of an optical fiber. In contrast, Siden teaches a device for removing insulation from a metal wire that conducts electricity. There is a vast difference between devices used for stripping electrical insulation (Siden) and devices for stripping the covering layer of an optical fiber (present invention). Thus, one of ordinary skill in the art would not be motivated to look to wire stripping device (Siden) to make a device for removing the outer layer of an optical fiber. For this reason alone, the Section 103 rejection should be withdrewn. Examiner disagrees. Indeed, Siden does explicitly state <u>fiber optics materials may be stripped by the device (see column 2, lines 56-57)</u> just as Appellants' device is intended for. [Emphasis in original.]

Appellants respectfully submit that the Title, abstract, background section,

and the majority of the written specification of Siden teach a "wire stripper" and stripping of "wire insulation." Appellants have reviewed column 2, lines 56-57 of Siden, pointed out by the Examiner, which teaches that "optics materials" can be stripped using the wire stripper. Even if this language is interpreted to include "optical fibers," Siden still does not teach or suggest the claimed invention for the many reasons of record and for the following reasons. In summary, see page 6 of Appellants' Appeal Brief, which demonstrates that Siden requires a sharp "edge," which is very different from the claimed "edge" having an edge angle that is substantially 90°, i.e. not sharp. A sharp edge will damage optical fibers. See also the pictures of the "edge" according to the present invention compared to the "edge" of Siden on page 6 of the Appeal Brief.

The Examiner argues on page 6 of the Examiner's Answer that:

Appellants argue, at pages 6-8 of the brief, Siden's blades taper down to a sharp edge and do not have an edge surface substantially perpendicular to side surfaces of the cutting blades as claimed. In response, Siden's edge surfaces of the cutting blades (24/26/34) have been interpreted as the edges that are received in recesses of blocks (20/22/32, see Figs.2 and 4). Appellants argue the claimed edge of the blade is "the cutting surface that contacts the optical fiber", and claims should be interpreted in light of the specification. In response, Examiner finds the alleged limitation is not in the claims. Further, claims are to be given their "broadest reasonable interpretation" during prosecution, and limitations found in specification should not be imported or read into claims. The specification is not the measure of invention. Therefore, limitations contained therein cannot be read into the claims for the purpose of avoiding the prior art.

Appellants respectfully submit that the Examiner is once again confusing adding limitations to a claim with proper interpretation of claims. It is now well established in patent law that to ascertain the meaning of patent claims, one must first look to the "intrinsic" evidence, including the literal language of the claims and the patent specification.¹ The specification is the single best guide to determine the ordinary

¹ See, e.g., Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005) (en banc), cert.

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meaning of a claim term.2

In cases where the ordinary and customary meaning of the claim language as understood by a person of ordinary skill in the art is readily apparent, claim construction involves little more than the application of the widely accepted meaning of commonly understood words. General purpose dictionaries are helpful in this circumstance.³

The claimed invention specifically recites that each cutting blade has an "edge surface." Thus, the term "edge surface" is a recited claim term. Appellants are not adding any claim terms to the claims. The Examiner has not shown how Appellants are attempting to add new claim terms to the claims.

It is well known in the art that a cutting blade has an "edge" for cutting and a handle to hold the cutting blade. The term "edge" of a cutting blade is well defined and has a commonly accepted meaning. On page 8 of the Appeal Brief, Appellants properly cited the present specification to demonstrate that they are only using the term "edge" in its customary and known meaning, not to introduce any limitations into the claims. Furthermore, common dictionaries, such as Marriam-Webster's, defines an edge as "the cutting side of a blade." See http://www.m-w.com/dictionary/edge.

Contrary to established case law, the Examiner now unreasonably interprets the claim term "edge" to mean something other than its ordinary and customary meaning and something other than is taught in the present specification. The Examiner attempts to now argue that the <u>handle</u> of a cutting blade is an edge, without citing even one reference that shows holding a cutting blade by the edge and cutting with the handle. The alleged "edges that are received in recesses of blocks (20/22/32, see Figs.2 and 4)"

denied, 126 S.Ct 1332 (2006); Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996) ("we look to the words of the claims themselves ... to define the scope of the patented invention."); Minnesota Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc., 976 F.2d 1559, 1576 (Fed. Cir. 1992).

² Phillips, 415 F.3d at 1313.

³ Phillips, 415 F.3d at 1314.

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of Siden is the handle of the cutting blade and cannot be used to cut, i.e. it is not the "edge" that is used to cut. The Examiner provides no support for his interpretation of the "edge" of a cutting blade to now mean the handle. For this reason alone, the Examiner has not provided a prima facie case of obviousness and Section 103 rejection should be withdrawn.

The Examiner argues on pages 6-7 of the Examiner's Answer that:

Appellants' arguments (items a and b at pages 8-9 of the brief) regarding to the thickness and the bending elasticity are not persuasive. Since Siden's plastic cutting blade is made of the same material (polycarbonate, polystyrene, acrylonitrilebutadiene-styrene) as Appellants disclosed (see page 5 of the specification), and further Siden's cutting blades (34,24,26) do have a thickness and a bending elasticity. To select a certain thickness range and a bending elasticity range for Siden's cutting blades such as in the range of 0.06 - 1 mm and in the range of 900 - 20,000 MPa, respectively, would have been obvious to one having ordinary skill in the art, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233 (CCPA 1955).

Appellants respectfully submit that one cannot optimize what is not taught. Siden does not teach a cutting blade having the claimed "edge" and, thus, one cannot optimize the size and properties of the claimed cutting blade.

The Examiner argues on pages 7-8 of the Examiner's Answer that:

Appellants also argue (items c and d at page 10 of the brief), Siden does not teach using a receiver body "sized such that when an optical fiber is set on a surface of said receiver body opposite to said cutting blade the length of the optical fiber is longer than the thickness of said cutting blade", and Siden does not teach or even suggest any guide means, and surely not a guide means for guiding optical fiber. Examiner disagrees with the arguments. First of all, Siden indeed does suggest the device is to be used for stripping optical fiber as claimed (note column 2, lines 56-57 in Siden). Further, Siden's receiver body (36) is sized such that when an optical fiber (40) is set on a surface of the receiver body (36) opposite to the cutting blade (34), the length of the optical fiber (40) is longer than the thickness of the cutting blade (34, see Siden's Fig.4) as claimed. Siden's element (15/16, see Fig.1) is interpreted as the claimed "guide means" since it is fully capable of guiding an optical fiber to a

removing position between a receiver body and cutting blades as claimed.

Siden's receiver body 36 is not a guide because it is a flat surface. See column 5, lines 6-9 of Siden, which clearly states "anvil 36, should be made of a flat material..." A flat surface cannot guide an optical fiber to be stripped.

In contrast, see Fig. 6 and page 8, lines 19-24 of the present specification, which discloses a notch as an example of a guide, which can guide or position the optical fiber. For this reason, the Section 103 rejection should be withdrawn.

The Examiner argues on page 8 of the Examiner's Answer that:

Appellants' arguments (at pages 10-13) with respect to the JP '803 reference are basically the same as those with respect to the Siden reference, namely, the interpretation of the claimed edge surface, the ranges for the thickness and the bending elasticity of the cutting blade. Examiner's response to these arguments is the same as those for Siden's.

Appellants respectfully submit that the arguments they presented in their Appeal Brief regarding JP '803 are not merely "basically the same as those in respect to Siden." Appellants provided detailed arguments showing how the claimed invention is not obvious over JP '803. In summary, as discussed on pages 11-12 of the Appeal Brief, JP '803 requires the use of a sharp "edge." In contrast, the claimed "edge" having an edge angle that is substantially 90°, i.e. not sharp. See also the pictures of the "edge" according to the present invention compared to the "edge" of Siden on page 11 of the Appeal Brief. For this reason alone, the Section 103 rejection should be withdrawn.

In view of the lack of *prima facie* case of obviousness, the many differences between the claimed invention and the cited references, and the unexpected advantages of the claimed invention, it is believed that this application clearly and patentably distinguishes over the combination of the cited references and is in proper

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condition for allowance. Accordingly, Appellants respectfully request that the Board allow claims 1-14 over the cited references.

Respectfully submitted,

Manelli Denison & Selter, PLLC

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Jeffrey S. Melcher Reg. No.: 35,950

Tel. No.: 202.261.1045 Fax. No.: 202.887.0336

2000 M Street, N.W. 7th Floor

Washington, D.C. 20036-3307